

EVonyx, Inc.

85 Executive Boulevard - Elmsford - New York - 10523 - Phone. 914-345-9555 - Fax.- 914-345-9558

EVONYX, INC.

A Subsidiary of Reveo, Inc.

EVonyx, Inc., headquartered in Elmsford, NY, with laboratory facilities in Hawthorne, NY, is an ETP subsidiary of Reveo, Inc., a research and development company whose mission is to develop inventions at the cutting edge of science and technology and turn them into products for the benefit of humanity. Reveo's ETP (Edison Technology Portfolio) strategy incubates subsidiaries that focus exclusively on a particular technology application.

Mission: The company's mission is to provide innovative energy solutions for humanity in the 21st Century through the application of its breakthrough zinc-air RPC electrochemistry that will achieve two clear goals:

1. To supplant the internal combustion engine in all applications including scooters and electric vehicles; and
2. To become the standard power supply technology for all portable electronic devices, including cellular phones and portable computers.

The company also plans to scale its RPC technology for use in zero-emission electric vehicles and power sources for homes, businesses and factories. During the last eight years, EVonyx has invented, synthesized, produced and employed a new fuel cell source for high performance applications in these markets.

In comparison with other fuel cell technologies, the Revolutionary Power Cell is believed to be:

- the longest running
- lowest cost
- highest energy
- scaleable
- smallest in size and weight
- a truly zero-emission power source
- rechargeable and refuelable
- outperforms, at lower cost, hydrogen-based fuel cells and all advanced batteries

Fully-developed RPCs have innovative configurations and high-performance components:

- High performance air-cathode
 - Discharge current of 500 mA/cm² in air and 2 a/cm² in oxygen
- Powerful rechargeable zinc anode
 - More than 500 mA/cm²
 - More than 500 cycles
- Unique OH⁻ - conducting solid-state membrane
 - High conductivity (0.35S/cm). Suitable for separator cathode protection and other uses.

The unique solid state membrane with high ionic conductivity that EVonyx has developed replaces liquid electrolyte in some applications. It also provides high cycle life (>500 cycles) at high recharge current (200 mA/cm²) when used as a separator, extends cathode life when coated on cathode; and

its low cost processing method can be applied to other ionic conducting systems (for H^+ , Na^+ and Cl^-). The commercial application of the solid membrane technology is for batteries and fuel cells, separators, and electrochemical and chemical processes.

031400

REVEO, INC.

Company Backgrounder

Reveo, Inc., a research and development company headquartered in Elmsford, New York, was founded in 1991 by Sadeg M. Faris, Ph.D., a prolific inventor with over 100 patented inventions and a successful track record of taking new technologies to the marketplace. The company's mission is to develop inventions at the cutting edge of science and technology and turn them into products for the benefit of humanity in the 21st Century.

Reveo's Edison Technology Portfolio (ETP) is a philosophy and strategy to incubate and spin out subsidiaries that focus exclusively on a particular technology application. This involves selecting a portfolio of significant technologies that will be developed and introduced to the marketplace. Many technologies have been identified and selected for inclusion in the ETP. To date, three technologies have been spun-off as independent companies after satisfying the fourth criteria above:

- **VRex, Inc.:** VRex, Inc. was founded in 1993 to market exclusive 3D stereoscopic products to consumers and professionals in market segments that include multimedia, virtual reality, medical imaging, education, and teleconferencing. The 3D stereoscopic products greatly enhance images by preserving the depth information (the third dimension), thereby providing compatibility with the stereo vision of humans.
- **EVonyx, Inc.:** is the Reveo subsidiary whose air metal fuel cell technology may well represent highly significant developments in fuel cell and battery technology. EVonyx believes that its new technology overcomes the challenges and limitations that have impeded previous portable electrical energy technologies. When compared to existing standard or alternative energy sources, the company believes that its new solid state air metal fuel cell, called the Revolutionary Power Cell (RPC), provides a more powerful electric energy source with long life at low cost in virtually any size or weight configuration.

EVonyx further maintains that its RPC outperforms hydrogen-based fuel cells and conventional batteries. The RPC provides up to ten times the life and five times the power for as little as one-tenth the cost of available batteries with no adverse environmental impact. EVonyx expects that its RPC will furnish low-cost portable electric power to consumers for many important applications, such as cellular telephones, portable computers, other personal electronic devices, power tools and lawnmowers. They also anticipate that scaled-up versions will be able to power zero-emission motorbikes, scooters and automobiles, as well as homes, businesses, factories and other stationary power applications.

CLCEO, Corp.: CLECO Corp, was established to focus on the research, development, manufacture, and marketing of advanced ultra-high performance applications and products based on Cholesteric Liquid Crystal (CLC) materials. Products with significant market potential include ultra-high capacity optical storage disks, high brightness LCD displays, smart windows, and broadband reflective polarizers. These products span several diverse market segments.

Since commencing operations in 1991, Reveo has successfully completed numerous technology development contracts for federal agencies and Fortune 500 corporations. Reveo continues to expand contract research and development activities to help finance promising technologies.

Reveo, Inc. and its three subsidiaries are headquartered in Elmsford, NY.

022400

REVOLUTIONARY POWER CELL (RPC) FACT SHEET

Fundamental Breakthroughs

- Fully-developed RPC's achieve high power and energy density
 - Innovative configurations and high performance components
- High performance air-cathode
 - Discharge current of 500 mA/cm² in air and 2 A/cm² in oxygen
- Powerful solid state metal fuel anode
 - More than 500 mA/cm²
 - Rechargeable up to 700 cycles @ 200 mA/cm²
- Unique OH⁻ conducting solid-state membrane
 - High conductivity (0.35 S/cm.)
 - Replaces liquid electrolyte in some applications
- Low cost processing method can be applied to other ionic conducting systems for H⁺, Na⁺ and Cl⁻)

Proprietary Fuel Formulations

- High power and current density metal fuel
- Proprietary anticorrosion formulations
- Improved rechargeability
- Manufacturable at low cost
- Environmentally friendly, non-polluting, environmentally benign
- Safe storage and transport

Technology Comparison By Application

Application	Revolutionary Power Cell (RPC)	Primary Alkaline Battery	Nickel Metal Hydride Battery	Lithium Ion Battery
Portable Electronics (run time same weight)	Up to 750 minutes	55 minutes	100 minutes	160 minutes
Portable Electronics (run time same volume)	Up to 1000 minutes	100 minutes	160 minutes	160 minutes
Cost	Comparable to or less than primary alkaline	Comparable to RPC	Three to five times the cost of the RPC	Ten times the cost of RPC

Application	Revolutionary Power Cell (RPC)	Hydrogen Fuel Cell	Nickel Metal Hydride Battery	Lead Acid Battery
Electric Vehicle Range (same weight)	Up to 600 miles	Up to 120 miles	Up to 110 miles	Up to 65 miles
Electric Vehicle Range (same volume)	Up to 500 miles	Up to 100 miles	Up to 100 miles	Up to 65 miles
Cost	1/10 the cost of Hydrogen Fuel Cell	Ten times the cost of RPC	Twice the cost of the RPC	Same as RPC

Competitive Comparison by Attribute

Characteristics	Revolutionary Power Cell (RPC)	Hydrogen Fuel Cell	Primary Alkaline Battery	NiMH Battery	Lithium Ion Battery
Scaleable	Yes	Yes	No	Yes	No
Power Density (Watts/Liter)	300 - 500	200 - 300	100	300	100
Refuelable	Yes	Yes	No	No	No
Rechargeable	Yes	No	No	Yes	Yes
Emissions	None	CO and CO ₂	N/A	N/A	N/A

Competitive Comparison for Power Applications

Parameter	Revolutionary Power Cell (RPC)	Lead Acid	Lithium Ion
Energy Density Wh/kg	300-500	35-40	100
Power Density W/kg	150-300	100-150	<1000
Cost \$/kWh	20-35	100-150	>1000
Cost \$/kW	25-50	18-30	1000
Recharging time hrs	2-3	3-8	3-8

Source: EVonyx, Inc.
031500a